# NOTES ON AUSTRALIAN DIPTERA. XXI.

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(Seven Text-figures.)

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## Family Asilidae.

### Genus Ommatius Wiedemann.

I have carefully examined all the Australian material available to me in the United States National Museum, kindly placed at my service by Dr. Aldrich of that institution, and identify as amongst this the following four species generally placed in *Ommatius*.

### Ommatius chinensis (Fabricius).

In a recently published paper (*Proc. Roy. Soc. Qsld.*, xl, 1928, 61) Mr. G. H. Hardy has figured the hypopygia of eight Australian species, including that of *chinensis*. He questions the identity of the Australian species with the one occurring in Asia, and under his figures credits the species to Ricardo. The Australian specimens I have seen agree absolutely in every detail with undoubted examples of *chinensis* from Japan in the collection of the United States National Museum.

Mr. Hardy's figure of the hypopygium of *chinensis* is incorrect, the portion lettered as the upper forceps being merely a slightly raised section margined by a slightly depressed striate line of demarcation, and both his "*u.f.*" and "*l.f.*" constitute the upper forceps (ninth tergite). I figure the hypopygium of an Australian male (Text-fig. 1) showing the various portions from the side as in Hardy's published figures.

As additional characters distinguishing this species from the genotype of *Ommatius*, and from the Australian species of the genus, one may list the much wider vertex, upon the sides of which the hairs extend to anterior margin instead of being confined to posterior margin, the broader and more uniformly haired face, the short, preapically sulcate, scutellum, and the fusion on the subcostal cell with costa at a point almost above the cross-vein instead of distinctly before it. As I have already pointed out in a previous paper, I do not consider this species belongs to *Ommatius*, but I am unable to determine if it is an *Allocotosia* for lack of an opportunity to examine the genotype of the latter.

*Locality.*—Cairns, N. Queensland.

### Ommatius distinctus Ricardo.

In the male sex this species is readily distinguished from the other species by the presence of a conspicuous blackish spot at apex of the costa of wing. The female is not so readily distinguished because the wings are almost or quite

clear. There is a character in the bristling of the mid femur which appears to be reliable for distinguishing both sexes from the other two small species now before me. This character consists of the arrangement and number of bristles on the anterior side of the femur. In *distinctus* all the bristles are confined to the anteroventral surface beyond the middle, but in the other two there is one bristle on either the anterior or anterodorsal surface about in vertical line with the one on anteroventral surface nearest to the apex of femur. I have figured the femora of the three species to illustrate better what is intended (Text-figs. 2, 3, 4). In all three species there is a single bristle on the anterior side about one-fourth from the base and also three anteroventral bristles, the one nearest apex being slightly higher placed than the others. The distinction in the three species lies in the presence or absence of an additional bristle above the one nearest apex, and, when present, in its position. In *distinctus* this additional bristle is lacking (Text-fig. 2), while in the other two species it is present. This character holds throughout the material I have in both sexes, but, owing to the fact that the leg bristles in this family are notoriously variable both in number and in colour, it would be too much to expect that it will hold invariably in all specimens of this or the other two species. These strong bristles are black and readily distinguishable in *distinctus* and *queenslandi*, but usually they are pale in *flavicaudus*. Ventral plate as in Text-figure 5.

*Localities.*—Cairns and Gordonvale, N. Queensland (E. Jarvis; J. F. Illingworth).

### Ommatius queenslandi Ricardo.

Rather darker in colour than *distinctus*, with the costa of wing very slightly incrassated and in some specimens with a very faint indication of a dark apical spot.

Hardy's figure of the hypopygium is rather diagrammatic to give a proper conception of its structure, so I present figures of it and the ventral plate (Text-figs. 6, 6*a*). The latter is glossy black, furnished with long yellow hairs, and at bases of these there is a dense fringe of short pale hairs.

I have seen only males of this species, and in these the entire facial bristling is yellowish-white and extends over three-fourths of the distance from lower margin to bases of antennae. The facial bristles in *distinctus* are mixed black and white and they do not extend over two-thirds of the distance to bases of antennae.

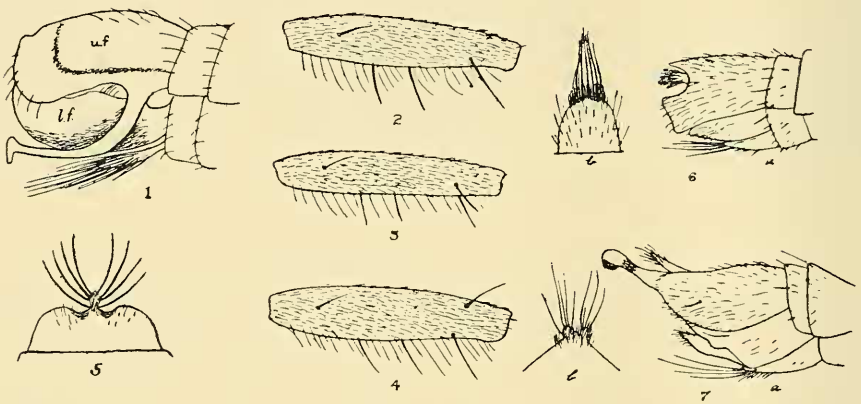
*Localities.*—Cairns and Gordonvale, N. Queensland (E. Jarvis).

### Ommatius flavicaudus, n. sp.

This is evidently the species accepted as *dimidiatus* Macquart by Hardy, and possibly also by White. In all the specimens of both sexes now before me, the apex of the abdomen is quite conspicuously testaceous yellow, and it would appear remarkable that Macquart, who usually noted colour characters very closely, should have overlooked this feature if he had the present species before him when he described *dimidiatus*.

White claims for the New South Wales examples that he had, only that they agreed "fairly well" with Macquart's description, and I am of the same opinion as Hardy, that he probably had two species mixed in his series. I do not know the basis for the latter's statement that the locality Tasmania for *dimidiatus* is erroneous, as the type specimen is lost or destroyed and neither its source of origin nor identity can be determined authentically now.

Male and female.—Fuscous, densely grey dusted, at least the apical tergite and hypopygium in the male, and the apical tergite in female, testaceous yellow. Frons black, dark brown dusted in front, face yellowish-grey dusted, frontal hairs black, all the hairs and the bristles on face and occiput whitish-yellow; antennae black. Mesonotum with three broad, fused partial, subshining, fuscous vittae, the hairs and bristles except the lower notopleural bristle yellowish-white. Abdomen with the hairs and bristles, except a few at apex, yellowish-white. Wings hyaline, with a faint dark shade at apex. Legs reddish-yellow, with the following black markings: front femora except below, anterior surface of mid femora, a preapical ring on each hind femur, sometimes broken below, the apices of all tarsal segments, the latter progressively more broadly black from basal to apical segment; most of the femoral and tibial bristles whitish or yellowish, those of the tarsi mostly black.




Text-fig. 1.—*Ommatius chinensis*. Hypopygium from the side.
Text-fig. 2.—*Ommatius distinctus*. Mid femur from in front.
Text-fig. 3.—*Ommatius flavicaudus*. Mid femur from in front.
Text-fig. 4.—*Ommatius queenslandi*. Mid femur from in front.
Text-fig. 5.—*Ommatius distinctus*. Ventral plate.
Text-fig. 6.—*Ommatius queenslandi*. *a*, hypopygium from the side; *b*, ventral plate.
Text-fig. 7.—*Ommatius flavicaudus*. *a*, hypopygium from the side; *b*, ventral plate.

Bristles of face extending over two-thirds of the distance from lower margin to bases of antennae. Scutellum with two strong apical bristles which are divergent and slightly forwardly sloped. Hypopygium as in Text-figure 7. Mid femur with the anterior bristles as in Text-figure 3; hind femur with anteroventral and posteroventral bristles in both sexes. Costal vein quite noticeably swollen beyond apex of subcostal vein, but not noticeably explanate, in male, costal vein in female hardly swollen.

Length, 9-10·5 mm.

Type, male, allotype, one male and one female paratypes, Cairns, N. Queensland (J. F. Illingworth); two male paratypes, Gordonvale, N. Queensland (E. Jarvis). United States National Museum.

The entirely pale facial hairs and bristles would appear to be an additional character for considering this species as distinct from *dimidiatus*, and the markings of the legs could by no means be construed to fit Macquart's description.